

The Elevator Speech for Research

- Part A: Elevator Speech Basics
- Dr. Carrie Cameron, Ccameron@MDAnderson.org
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- Part B: Elevator Speech Styling
- Dr. Tamara Laskowski, TJLaskowski@MDAnderson.org
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For current slides, attend the annual Elevator Speech workshops in July. View the schedule at <http://bit.ly/FinalSummerEvent>.

Elevator Speech Basics

by Dr. Carrie Cameron



- What they are
- What they are NOT
- Owning what you do
- Critical thinking

Partner Interviews

- Explain your research, providing:
 - What you're doing
 - Why you're doing it
 - How it will help science or people
 - **90 seconds max!**
- Listener writes down answers (in summary form)...
- ...
- Then switch places

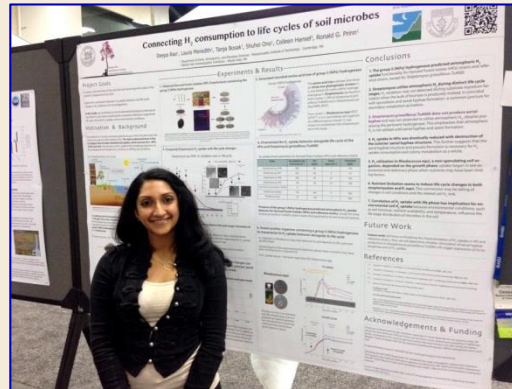
Who Are You?

“Your playing small doesn’t serve the world. There is nothing enlightened about shrinking...And as we let our own light shine, we unconsciously give other people permission to do the same.” -*Nelson Mandela*

“Many poets are not poets for the same reason that many religious men are not saints: they never succeed in being themselves.”

-*Thomas Merton*

How will you use your elevator speech?



The Competition

- Summer Research Final Event
- Annually each August
- Finalists compete for
- \$ Cash prizes! \$
- Event details posted at <http://bit.ly/FinalSummerEvent>



Road Map

Workshop #1

- Purpose of Elevator Speeches
- Design and construction
- Interviewing to generate content
- Drafting
- Assignment: Complete your draft



Quantum Physics made simple

This is a great example of a scientific elevator speech!

http://mediahub.rice.edu/video.aspx?DestinationID=URka-_E5-0-e4girH4pDPQ&ContentID=Ma7SxNkS_kGa7ygxHS7-8A&sharing=true

Elements

Audience Involvement

- **Begin your talk by addressing the audience**
 - Ask a question
 - Make the audience think of something relevant to their own work or life
 - Use a prop
- **Examples??**

Analogy

- Aristotle, *Poetics*: “To be a master of metaphor is the greatest thing by far. It is the one thing that cannot be learnt from others, and it is also a sign of genius.”
- Analogies compare something abstract to something more concrete or familiar.

Analogies, cont'd

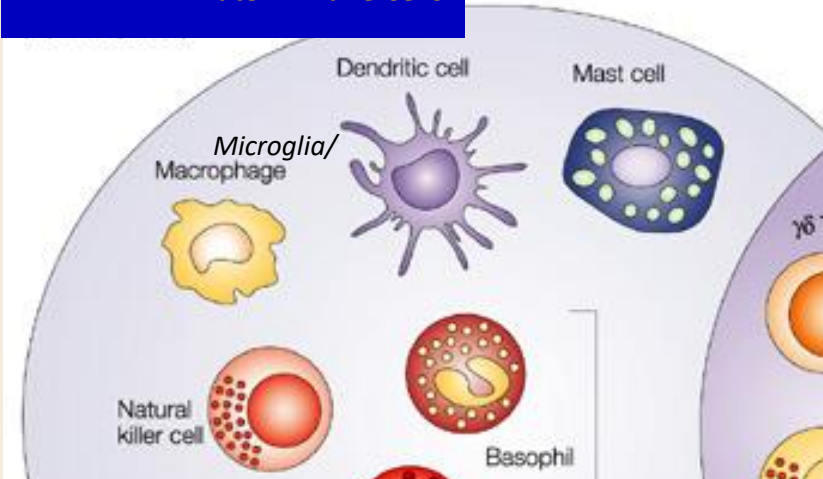
- They can take time to develop, but are well worth the trouble.
- Developing them and testing their limits is a good thought exercise.
- If it's hard to develop an analogy, you can work with a conversation partner and have them propose one and follow with questions.

“Cocktail Party Effect”

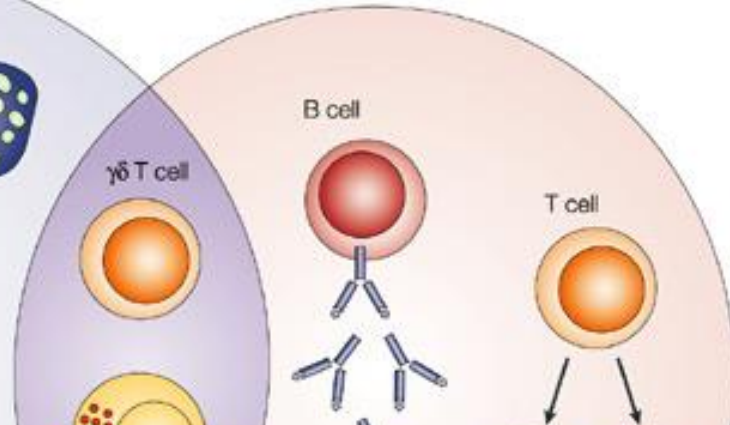


The Immune System

Innate immune Cells



Adaptive Immune Cells



Slide courtesy of Felix Nwajei, 2014. *Cytokines in cancer pathogenesis and cancer therapy.*
Nature Reviews Cancer, 2004.
US Infantry; Wall.alphacoders.com

Anecdotes

- **Anecdotes are little stories that help illustrate a point.**
- **They help engage the audience.**
- **Ideas: a short story about how you found your chosen field, a great moment or instructive failure in the science**

Presentation tips

- *Pause between sentences. Don't rush!*
- Use note cards in case you get stuck.
But don't read.
- Use gestures to help you remember and relax.
- Rest your gaze for a full phrase on a specific person, then move to another.
- Did we mention **ENTHUSIASM???**

Gestures

- Do they really do any good? **YES**
- They...
 - Demonstrate enthusiasm
 - Make you appear bolder and more convincing
 - Help illustrate abstract points
 - Help you remember your speech
- Craft them and practice them
- Amy Cuddy TED talk on body language

Rehearsal tips

- Learn all the pieces of your speech **separately and out of order**. Practice the pieces backwards.
- Remind yourself of how your speech goes: “first I ask the question about looking at the stars, then I make the contrast about huge solar system and tiny atoms..., then I say what my problem is and how I want to use it for a quantum computer...”

Rehearsal tips

- **Do NOT keep ‘fixing’ your speech at the last minute!**
- **When rehearsing, perform a rhythmic physical activity.**
- **Sing or ‘declaim’ your speech; play a role, such as politician or salesperson (oddly effective)**

Styling the Elevator Speech

by Tamara J. Laskowski, PhD.

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Styling your Elevator Speech:

- Language
- Audience Involvement
- Anecdotes
- Analogies

Adapted from Nicholas Whiting, PhD

Language: Jargon is bad

- Avoid grammar and scientific jargon
 - E.g. Our methodology enhances the overall anti-tumorigenic effect of these immune cells
 - *Instead say: Our approach makes immune cells more capable of destroying cancer*
 - E.g. The gene expression level observed through RT-PCR analysis confirmed restoration of promoter activation
 - *Instead say: We observed the gene function had returned to normal*

Language: Keep it simple

- *Use simple sentences*

*Examples of what **NOT** to do:*

- *We performed a Genome-wide association study to analyze all possible SNPs that may be associated with high cholesterol. We identified a few strong candidate genes, and our goal is to further study these genes in order to learn their role in cholesterol synthesis. This knowledge will allow us to investigate possible ways to control their function.*

Language: Keep it simple

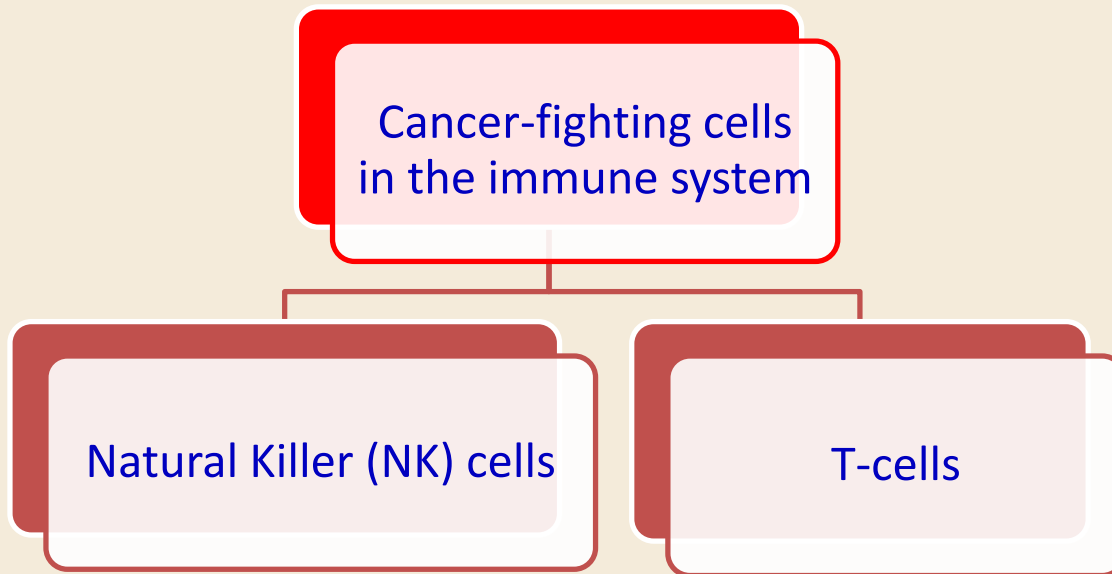
- *Use simple sentences*

Example:

- *Through our studies, we have identified a few genes that are associated with high cholesterol. We are now investigating possible ways to control their function.*

Language: Make it clear

- **Make relationships between concepts explicit and clear – improves comprehension**



E.g. "T-cells are powerful immune cells that can kill cancer"

Language: Help the audience

'Flagging' is adding little signs to your sentence so the audience doesn't have to guess how it fits in with what you're saying.

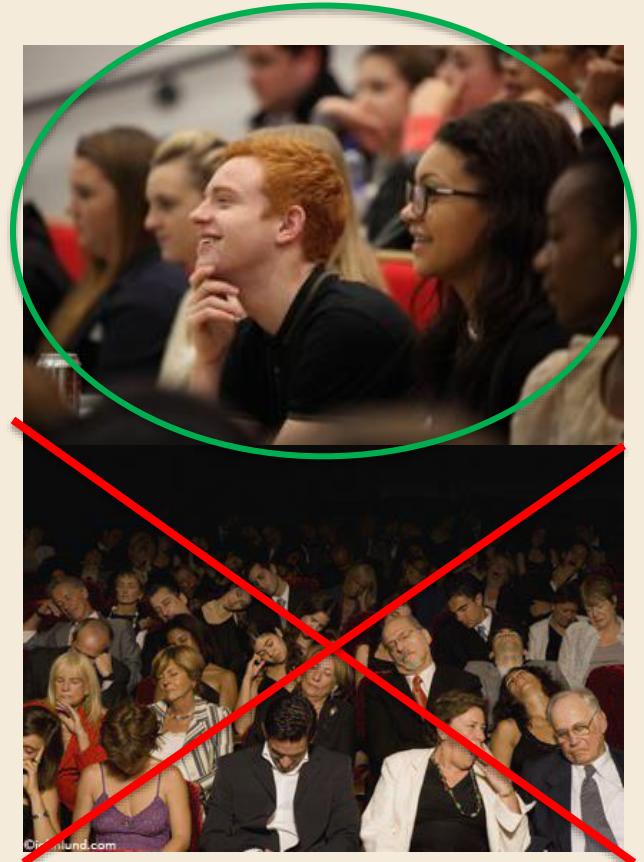
Examples:

- *"This is **really exciting** to us, because..."*
- *"We were **encouraged** when we got this result..."*
- *"...which is **highly significant**."*
- *"Our group **was the first** to establish..."*
- *"This finding, **by contrast**,..."*
- *"**On the other hand**...."*

Audience Involvement

It is critical to engage the audience from the beginning—you need them to invest in you

- *Speaker must be compelling and enthusiastic*
- *Make eye contact*
- *Smile*
- *Audience must buy-in to both the 'story' and the 'author'*
- *Short amount of time ➡ no room for wasted moments*



Tips for Audience Engagement

Instead of beginning with an introduction, begin with an effective 'hook'

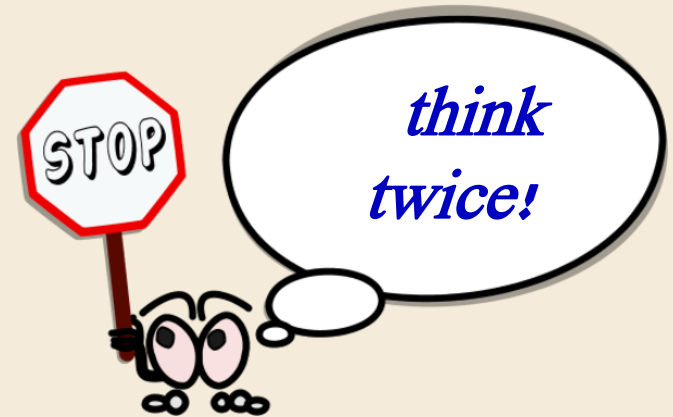
- Pose a question ✓
- Make the audience think of something relatable ✓
- Use a relevant prop ✓
- Dispel preconceived notions ✓
- E.g. Did you know that the bacteria in your gut can help fight cancer?



Audience Engagement

- **Risky hooks (not advised):**

- **Joke ✗**
- **Anything controversial ✗**
- **Apologize ahead of time ✗**



Goal: capture the audience's attention and get them on your side

- **Two tips:**

- **Anecdotes**
- **Analogies**

Anecdotes

- Short personal stories that help to illustrate a point
- Anecdotes are helpful to:
 - Describe research that is behavioral- or clinical-based
 - Engage the audience and make you relatable
- **Keep it short:** One or two sentences. It is easy to let the anecdote take over the speech.

Anecdotes: Tips

Must be relatable—the audience should identify or empathize with your anecdote

- **Ideas:**

- **short story about why you chose your field**
- **a great moment in your research**
- **an instructive failure in your research (with the idea that you have/will overcome this setback)**
- **something that happened outside of research that informed your research direction**

Example Anecdotes

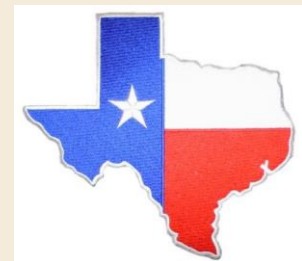
- Your love for dark chocolate led you to this research on the anti-oxidant properties of the cocoa bean



- How you noticed a correlation between your high school friends who smoked and those who suffered from depression



- How a correlation between cancer incidence and consumption of smoked meats may affect Texans!



Analogy

Compare something abstract to something more concrete or familiar

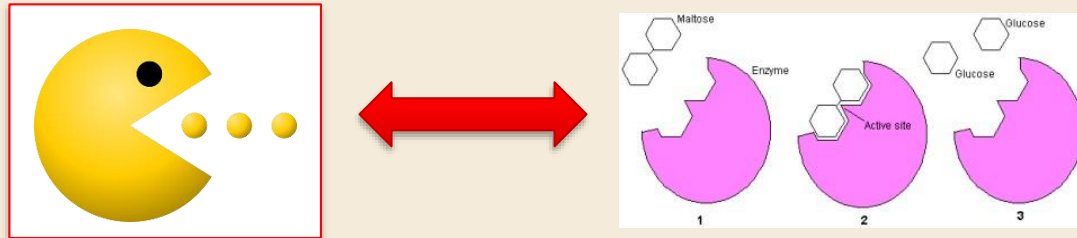
- **Allows the audience to relate to more complex science**
- **Analogy ‘paint a picture’ using metaphors**
- **Audience should be able to ‘get it’ fairly quickly—otherwise, it isn’t a good analogy**

Analogy: Tips

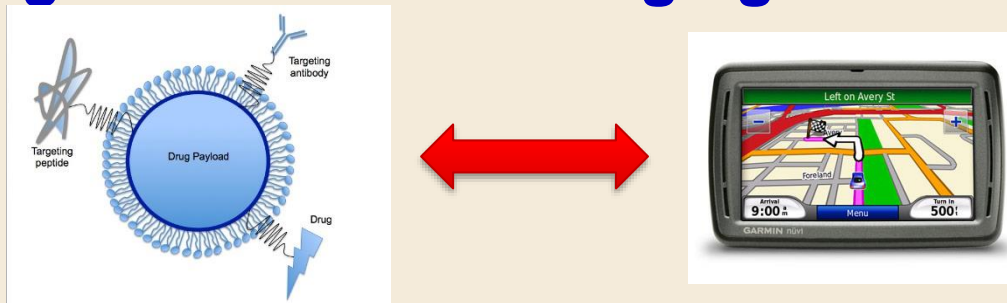
- **Take time to develop your analogy. It's worth it!**
- **Develop and test your analogies: it can be a good thought exercise.**
- **Get feedback from friends, colleagues, and mentors**
- **Keep it short—don't take up too much time explaining the analogy**

Examples of analogies

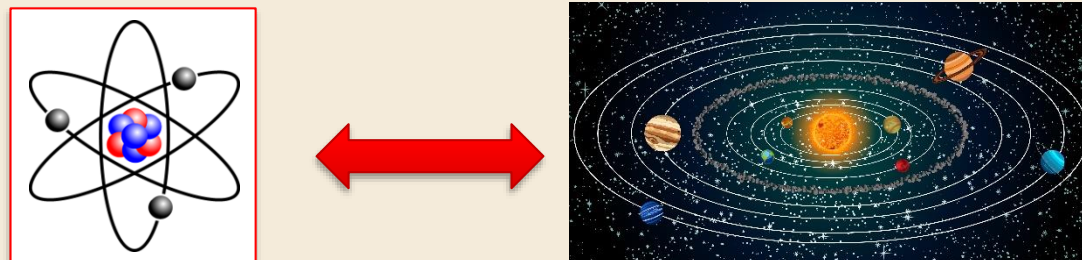
- Relating enzymatic reactions to the 'Pacman' video game



- Relating targeted molecular imaging as a car with a GPS unit



- Relating an individual atom to a solar system



Take-home lessons

- Engage the audience
- Use an effective hook to draw the audience in
- Anecdotes can be used for behavioral or clinical science
- Analogies work well for physical, biological, or engineering sciences
 - Keep them short, relevant, and to the point!

Re-cap: all about Elevator Speeches

1. *Figure out the elements of your speech and how they fit together*
2. *Keep the right proportions of information*
3. *Work on making your vocabulary and sentences simple, clear, accessible*
4. *Add “color” with anecdotes or analogies*

Part I : Introduction of your Elevator Speech

Easy!

- **Name**
- **Stage of training or rank (type of job)**
- **Lab, research group, or department**
- **Project or area of work**

Part II : Structuring your speech

- **STEP 1: Identify the problem/situation (context/ background)**
- **STEP 2: What is the problem or question? (gap in knowledge)**
- **STEP 3: What are you going to do about it? (purpose/ hypothesis)**
- **STEP 4: How are you going to do it? (approach/ methods)**
- **STEP 5: What have you done so far? (recent findings/ conclusions)**

Part III : Significance, implications, & future directions

- **What is the meaning of your data?**
(significance)
- **Why should we care?** (implications)
- **Where does the research go next?**
(future directions)